ABSTRACT OF THE DISCLOSURE

The invention is an optical reader having a plurality of imaging modules. In one method for operating a multiple imaging module reader of the invention, a second frame of image data captured via actuation of a second imaging module is automatically captured and subjected to decoding in the case an attempt to decode using a frame of image data captured via actuation of a first imaging module fails. In another embodiment, a frame of image data captured via actuation of an image sensor of a first module and actuation of illumination of a second imaging module is subjected to decoding. In another embodiment, frames of image data captured via actuation of image sensors of spaced apart modules are combined. The various modules of a multiple imaging module reader can be adapted to have different best focus positions so that a field depth of the reader is improved.